To: CN=Bruce Herbold/OU=R9/O=USEPA/C=US@EPA[]

Cc: CN=Carolyn Yale/OU=R9/O=USEPA/C=US@EPA;CN=Laura

Fujii/OU=R9/O=USEPA/C=US@EPA;CN=Tom

Hagler/OU=R9/O=USEPA/C=US@EPA;CN=Karen Schwinn/OU=R9/O=USEPA/C=US@EPA[];

N=Laura Fujii/OU=R9/O=USEPA/C=US@EPA;CN=Tom

Hagler/OU=R9/O=USEPA/C=US@EPA;CN=Karen Schwinn/OU=R9/O=USEPA/C=US@EPA[];

N=Tom Hagler/OU=R9/O=USEPA/C=US@EPA;CN=Karen

Schwinn/OU=R9/O=USEPA/C=US@EPA[]; N=Karen Schwinn/OU=R9/O=USEPA/C=US@EPA[]

From: CN=Erin Foresman/OU=R9/O=USEPA/C=US

**Sent:** Wed 4/28/2010 7:10:30 PM

Subject: One more document for BDCP Alternatives Discussion today at 2:00 PM

2.25.10 SC HO Covered Activities and Associated Federal Actions List.pdf

Hi,

Sorry about all the emails and documents. Bruce reminded me that I had read a document that mentioned evaluation of operations. Attached is a document provided at the 2/25/10 steering committee meeting that goes through the activities to be evaluated in the effects analysis of the NEPA document.

SWP Operations -- on the first page it lists "State Water Project Diversions" with the contract maximum of 4.167 MAF. The list seems to imply that near and long-term operations criteria and adaptive range will be developed for evaluation as they are listed below SWP operations. It does not identify operation strategies to be evaluated.

New System (dual or isolated conveyance) -- on page 4-4 in section New Water Facilities Construction Operations and Maintenance, the document indicates that operations criteria and adaptive range will be developed.

CVP operations -- on page 4-7 the document states that reclamation is required to deliver 3.3 MAF/yr. Near and long-term operations criteria and adaptive range listed as things to be evaluated.

As far as I know, the range of operations for evaluation has not been identified. One operations plan, pumping full contract amounts  $^{\sim}$  3.3 MAF + 4.167 MAF = 7.467 MAF, is identified but we dont know where it falls in the range. It may or may not represent what DWR plans for the "ceiling."

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-----Bruce Herbold/R9/USEPA/US wrote: -----

To: Erin Foresman/R9/USEPA/US@EPA From: Bruce Herbold/R9/USEPA/US

Date: 04/28/2010 11:46AM

cc: Carolyn Yale/R9/USEPA/US@EPA, Karen Schwinn/R9/USEPA/US@EPA, Laura Fujii/R9/USEPA/US@EPA,

Sam Ziegler/R9/USEPA/US@EPA, Tom Hagler/R9/USEPA/US@EPA

Subject: Re: Call-in Number for BDCP Alternatives Discussion today at 2:00 PM

as I understand it RPMs are measures that need to be taken with the proposed action of a consulting federal agency, but with a finding of Jeopardy the Service produces an Alternative action that replaces the

proposed action. Since we have jeopardy here, we have an RPA that is made up of various pieces (each of which might be termed RPAs but I think that is not quite correct) Tom??

## Bruce

Erin Foresman---04/28/2010 11:25:34 AM---Hey Everyone,

From: Erin Foresman/R9/USEPA/US
To: Bruce Herbold/R9/USEPA/US@EPA

Cc: Carolyn Yale/R9/USEPA/US@EPA, Karen Schwinn/R9/USEPA/US@EPA, Laura Fujii/R9/USEPA/US@EPA,

Sam Ziegler/R9/USEPA/US@EPA, Tom Hagler/R9/USEPA/US@EPA

Date: 04/28/2010 11:25 AM

Subject: Call-in Number for BDCP Alternatives Discussion today at 2:00 PM

## Hey Everyone,

My luck with the conference room has been good this week. I set up a conference line. Those of you gathering in the Gila River Room and Carolyn if you are off-site call this number and use the access code. I'll start the conference line at 2:00 PM.

\* USA Toll-Free: (888)422-7124 \* PARTICIPANT CODE: 842235

Bruce, I'm not up to date on DWR's modeling or had discussions with DWR regarding operational alternatives. At a March 2010 meeting with lead federal and cooperating agencies (EPA, Corps, FWS, NOAA, and BOR), Corps asked about a "floor" evaluation and BOR indicated that it would be lower than operations with RPA's. (I thought it was RPM - reasonable and prudent measure??? what is the "A"???).

The water quality point is a good one for us to discuss today. Think about how we would capture that in estimating practicable operations alternatives. It should probably be included in all of them.

## Erin

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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-----Bruce Herbold/R9/USEPA/US wrote: ----

To: Erin Foresman/R9/USEPA/US@EPA From: Bruce Herbold/R9/USEPA/US

Date: 04/28/2010 10:33AM

cc: Carolyn Yale/R9/USEPA/US@EPA, Karen Schwinn/R9/USEPA/US@EPA, Laura Fujii/R9/USEPA/US@EPA, Sam

Ziegler/R9/USEPA/US@EPA, Tom Hagler/R9/USEPA/US@EPA

Subject: Re: Materials for BDCP Alternatives Discussion today at 2:00 PM

My apologies, I was in UCD wrestling with Luoma et al. all day both of the last two days and did not get into this email discussion.

I will be there this afternoon.

When last I knew, the BDCP modeling for dual conveyence was using the RPAs on Old and Middle river flows. Is that still true? Is that what DWR's suggested reduced export scenario consisted of?

Is there any inclusion of wq improvements in lieu of supply restriction? I.e. if you get better water it will go further in diluting poorer water from other sources (LA brackish groundwater or the Colorado?)

Bruce

Erin Foresman---04/28/2010 09:46:57 AM---Hi Everyone,

From: Erin Foresman/R9/USEPA/US

To: Tom Hagler/R9/USEPA/US@EPA, Laura Fujii/R9/USEPA/US@EPA, Carolyn Yale/R9/USEPA/US@EPA, Bruce

Herbold/R9/USEPA/US@EPA

Cc: Karen Schwinn/R9/USEPA/US@EPA, Sam Ziegler/R9/USEPA/US@EPA

Date: 04/28/2010 09:46 AM

Subject: Materials for BDCP Alternatives Discussion today at 2:00 PM

Hi Everyone,

Today we need to discuss BDCP operations alternatives with the goal of defining an operations strategy that increases regional water supply independence and subsequently reduces reliance on the Delta for water supply/distribution. Some have called this the "reduced-exports" alternative.

Discussion of BDCP conveyance alternatives becomes complex quickly. There are four basic alternatives that DWR is considering:

- 1. No Project
- 2. Through Delta
- 3. Isolated Conveyance
- 4. Dual Conveyance

There are various alignments for the isolated and dual conveyance options. One alignment for the "through Delta" alternative. There are also construction, sizing, and intake/diversion alternatives for through delta, isolated conveyance and dual conveyance. There are conservation alternatives and probably some other stuff I'm not thinking about right now. We are not focusing on these today, but need to be aware of them.

Our task today is to consider the operations strategies that would be evaluated for each of these basic alternatives: no project, through delta, isolated conveyance, and dual conveyance. Specifically, we need to discuss and generate ideas for how we would estimate the amount of water that would be extracted from the Delta in a "reduced-exports" alternative. Or we might call it a "Water-Independence" alternative or "Ecosystem Stability" alternative or "Co-Equal Goals" alternative.

Some things to think about are listed below. Please contribute your ideas by email or bring them to the meeting.

- 1. Estimating export volume as a function (formula) of available water supply given a set of ecosystem stability constraints (such as various fish populations, water quality parameters, etc...). Or how much water can be extracted given a sustainable ecosystem threshold. Totally easy right?
- 2. The 20X2020 Water Conservation plan that requires 20% reduction in urban water use by 2020 (this includes industrial uses).
- 3. Land retirement -- for example anticipated land retirement in Westlands water district and how that impacts need. There may be other examples of this as well.
- 4. Requesting information from each of the water contract holders on the composition of their water supply, a breakdown of where all of it comes from with projected future supply from each source.
- 5. Population growth
- 6. Historic exports (see attached graph).

Please look through the attached documents. They should help people visualize the conveyance portion of the BDCP and think about water exports.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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Fax: (916) 557 6877[attachment "BDCPAlternatives.pdf" deleted by Bruce Herbold/R9/USEPA/US] [attachment "Alternatives & Historic Water Exports 1956 to 2008.docx" deleted by Bruce Herbold/R9/USEPA/US]